

**SUMMARY OF FINANCIAL STATEMENT AUDIT
AND MANAGEMENT ASSURANCES**

Table 1.
Summary of Financial Statement Audit

Audit Opinion	Unqualified				
Restatement	No				
Material Weakness	Beginning Balance	New	Resolved	Consolidated	Ending Balance
Total Material Weaknesses	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>

Table 2.
Summary of Management Assurances

Effectiveness of Internal Control over Financial Reporting (FMFIA § 2)					
Statement of Assurance	Qualified				
	Beginning Balance	New	Resolved	Consolidated	Ending Balance
Total Material Weaknesses	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>
Effectiveness of Internal Control over Operations (FMFIA § 2)					
Statement of Assurance	Unqualified				
	Beginning Balance	New	Resolved	Consolidated	Ending Balance
Total Material Weaknesses	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>
Conformance with Financial management system requirements (FMFIA § 4)					
Statement of Assurance	Systems conform to financial management system requirements				
	Beginning Balance	New	Resolved	Consolidated	Ending Balance
Total Non-Conformances	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>
Compliance with Federal Financial Management Improvement Act (FFMIA)					
Overall Substantial Compliance	Agency		Auditor		
	Yes		Yes		
1. System Requirements	Yes				
2. Accounting Standards	Yes				
3. USSGL at Transaction level	Yes				

Note: “n/a” indicates not applicable.

IMPROPER PAYMENTS INFORMATION ACT (IPIA) REPORTING

The Improper Payments Information Act (IPIA) of 2002 and the recently issued OMB Circular A-123, Appendix C guidance require agencies to review all programs and activities, identify those that are susceptible to significant erroneous payments, and determine an annual estimated amount of erroneous payments made in those programs.

In 2005, in consultation with OMB, NSF revamped its IPIA approach and successfully executed it. NSF contracted for an annual statistical review of Federal Cash Transaction Report (FCTR) transactions received from grant recipients under the purview of the agency's IPIA program. NSF staff worked closely with the contractors to create a milestone chart, develop a sampling plan, and ensure ongoing grantee communication throughout the review.

NSF showed statistically low improper payment rates for our research and education awards. Consistent with OMB's guidance on improper payments, NSF requested, and OMB granted, relief from annual improper payments reporting because NSF improper payments were below the reporting threshold for two consecutive years. NSF will need to conduct a risk assessment or may be required to re-initiate measurement activities if there are any substantial changes to the program (e.g., legislation, funding, etc.) that may impact payment accuracy. NSF's next IPIA reporting is due in FY 2009.

In addition, NSF has established a robust, comprehensive grant pre-award and post-award monitoring program that builds risk reduction into its operational design. As part of this program, NSF expanded its FCTR transaction testing to cover low, medium and all high-risk awards. The current FCTR transaction testing is more comprehensive than the one used in NSF's 2005 IPIA initiative.

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NATIONAL SCIENCE FOUNDATION
4201 Wilson Boulevard
ARLINGTON, VIRGINIA 22230



OFFICE OF
INSPECTOR GENERAL

October 17, 2007

MEMORANDUM

To: Dr. Steven C. Beering
Chair, National Science Board

Dr. Arden Bement
Director, National Science Foundation

From: Dr. Christine C. Boesz
Inspector General, National Science Foundation

Subject: Management Challenges for NSF in FY 2008

In accordance with the Reports Consolidation Act of 2000, I am submitting our annual statement summarizing what the Office of Inspector General (OIG) considers to be the most serious management and performance challenges facing the National Science Foundation (NSF). We have compiled this list based on our audit and investigative work, general knowledge of the agency’s operations, and the evaluative reports of others, such as the Government Accountability Office and NSF’s various advisory committees, contractors, and staff.

This year’s management challenges are again organized under six broad issue areas: award administration; human capital; budget, cost and performance integration; information technology; U.S. Antarctic Program; and merit review. Ten challenges are drawn from last year’s list, some of which reflect areas of fundamental program risk that are likely to require management’s attention for years to come. Two new management challenges appear on this year’s list: USAP property plant and equipment, and audit resolution. We note that NSF continued to make progress this past year on several longstanding challenges.

If you have any questions or need additional information, please call me at 703-292-7100.

Award and Contract Administration

Post-award administration policies. NSF has worked toward developing and implementing an improved post-award administration regimen since 2002, when the OIG audit of NSF’s financial statements first recommended that the agency strengthen its policies and practices. An effective post-award monitoring program should ensure that: awardees are complying with award terms and conditions and federal regulations; adequate progress is being made toward achieving the objectives and milestones of the program and; expenditures listed on NSF’s financial statements are accurate. In FY 2007, NSF continued to make progress toward achieving those goals by correcting problems, such as poor documentation, that prevented the auditors from determining whether the program had been effectively implemented. Along with improving the quality and consistency of the documentation, the agency increased its oversight of high risk awardees by conducting 22 site visits and 115 desk reviews this year. NSF’s administrative oversight of these awards has greatly improved over the past five years, and the financial statement auditors determined this year that it should no longer be classified as a significant deficiency. However, our auditors will continue to monitor NSF’s efforts to follow up and act on problems identified in NSF’s site visits and reviews.

The challenge for the agency going forward is to maintain its commitment to effective post-award administration and refocus its efforts toward improving the monitoring of *programmatic* performance. The responsibility for this activity resides with NSF’s program officers, who need adequate time, written guidance, appropriate training, and effective monitoring tools to perform this vital function. But, since their primary responsibility is proposal review and award selection, little time is left for managing on-going awards. In addition, NSF provides limited guidance to program officers on how to oversee the programmatic performance of awardees, and no formal training is offered on the administrative and financial requirements contained in OMB Circulars. Finally, a recent OIG audit indicated that over the five-year period from May 1, 1999 to May 31, 2004, more than 45,000 (42%) required annual project reports on the progress of individual NSF awards had not been submitted. Without adequate support from the agency in the form of additional time, training, guidance, and monitoring tools, program officers may not be able to detect problems with an award in time to intervene.

Post-award oversight of cost-shared commitments by NSF awardees continues to pose a challenge to the agency. Although new cost-shared commitments by awardees have steadily decreased since the National Science Board decided to eliminate non-statutory cost-sharing requirements in 2004, our audits continue to find poorly documented cost-shared contributions on awards made before the Board acted. Last year, OIG auditors reviewed awards with more than \$13 million in cost-shared funds. In one case, a university was not able to document 90 percent of the \$2.1 million it claimed to cost-share. Recently the National Science Board decided to reconsider its policy on cost sharing. The Board has formed a task force to review the implications of their 2004 action and has been asked by Congress to report on the impact of suspending cost-sharing

for existing programs that were developed around industry partnerships and that historically required cost sharing. Whether or not cost sharing is reintroduced in the future, the challenge for the agency is to assure that awardees fulfill their remaining cost sharing obligations, which are still significant.

Contract monitoring. The monitoring and administration of NSF contracts first appeared as an internal control deficiency in the FY 2004 audit of the agency’s financial statements because NSF did not adequately review vouchers submitted by contractors who received advance payments. NSF has initiated corrective actions over the past two years, including reviewing vouchers submitted by larger contractors on a regular basis. It has also updated its contracting manual to strengthen its pre-award risk assessment guidance, contracting personnel roles, and contracting responsibilities to provide assurance that the problem will not recur.

However, contract monitoring remains a major management challenge because NSF does not have a comprehensive, risk-based system to oversee and monitor its contract awards and ensure that the requirements of each contract are being met. This year the financial auditors reviewed NSF’s progress and identified additional areas for improvement in post-award contract monitoring activities. They found that the contracting manual lacks sufficient material on post-award monitoring, risk assessment, and risk mitigation procedures. In fact, the problems that have affected NSF’s recordkeeping for its property, plant and equipment in Antarctica (see USAP management challenge) are a direct result of inadequate monitoring of an NSF contractor. The agency also needs a program to provide training for contracting officer’s technical representatives and detailed policies and procedures that make clear what is required of them.

Management of large infrastructure projects. NSF’s investment in large infrastructure projects and instruments such as telescopes and earthquake simulators presents the agency with a host of administrative and financial issues. In past audits, we have focused on the difficult challenge of managing the design, construction, and financing of these cutting edge projects and completing the facilities on time and within budget. The agency made progress this past year in addressing some of our longstanding concerns. For example, NSF has implemented our recommendation to establish a system that tracks the total costs of major equipment and facilities. Such information is necessary to maintaining effective project management during the construction phase and fostering an increased awareness of the total life-cycle costs of a large facility, including operations and maintenance. Training of agency staff on the new systems is scheduled for the coming year.

However, some of the issues we have raised in the past persist. While NSF has increased the personnel assigned to its Large Facilities Office to four, we are concerned that it is not adequately staffed to handle its increasing responsibilities for oversight of the full life-cycle of these facilities. Though the agency updated its facilities manual during the past year, it still has not completed the in-depth guidance necessary to carry out the broader policy. In addition, recommendations made last year by the Business and

Operations Advisory Committee¹ to establish annual facility reviews, formal risk-assessments, and a process for projecting how long the facility will meet future research needs, have not yet been implemented. Though progress was made on developing a guide for on-site visits, a final version of the guide has yet to be issued.

While NSF has improved its management of the construction phase of new facilities, it must continue to not only improve its management of and knowledge about the entire facility life cycle but also plan for the increased impact that facilities are having on NSF’s portfolio of awards as a whole. NSF’s challenge for managing future investments in facilities and infrastructure projects lies in the agency’s ability to perform more comprehensive planning for the overall life-cycle of these projects, and to include consideration of project risk management principles in making funding and other significant decisions.

In addition, NSF needs to determine a method for making strategic portfolio-management decisions. Operating costs of large facilities are continuing to grow, as are the number of active facilities in all phases of development. NSF is now faced with making tough funding decisions among competing priorities. Proposed facilities are competing for scarce resources not only with other new facilities, but also with existing facilities and traditional single-investigator research. NSF’s challenge is to create a portfolio management plan that takes into account these competing priorities and the research needs of the entire scientific community.

Audit resolution. Audit resolution, closure, and follow-up represent the final critical steps of the oversight process envisioned by the Congress when it passed the IG Act of 1978. Without properly developed and executed procedures to evaluate audit findings and correct the problems that have been identified, the value of audits and program reviews is largely lost, and a key element of an agency’s internal control system is seriously impaired. It is vital that NSF ensure prompt and proper resolution of OIG audits, the complete and timely implementation of audit recommendations, and the optimal recovery of questioned costs. For unknown reasons, the historic rate at which NSF has sustained costs questioned by its auditors has been low relative to other government agencies. Another challenge for NSF is to ensure effective implementation of proposed corrective actions given resource constraints and the large number of NSF awardees. OIG plans to contract with a third party in FY 2008 to review this important agency responsibility.

Human Capital

Workforce planning. OIG has identified workforce planning as a management challenge since 2002, the year that NSF’s Management Controls Committee first highlighted human capital as “a significant concern” during a long period in which its workload was growing much more rapidly than its workforce. By some measures, NSF’s workload has

¹ Report by the Facilities Subcommittee of the NSF Business and Operations Advisory Committee, June 10, 2006

become more manageable over the past two years as the number of program officers has risen from 385 to 438, effectively reducing the number of proposals handled per program officer from 113 in FY 2004 to 97 in FY 2006.

NSF appears to have made progress toward the goal of improving the planning process. During FY 2006, the agency developed a workload analysis tool to determine the FTE needs of the agency as a whole based on a directorate-by-directorate analysis. Although the tool is currently of limited use in allocating FTEs across directorates or prioritizing needed FTEs, it provides an objective basis for projecting and justifying the agency’s overall staffing needs. Over the past year NSF has initiated a succession planning process for recruiting, developing, and training NSF’s future managers. The agency also reports that a workforce plan aligned to the goals of the new NSF strategic plan has been completed and is being reviewed for compatibility with other key planning documents, such as the human capital plan and the succession plan.

However, in June 2007, OMB downgraded NSF’s score for human capital because it did not deliver a skill gap assessment for all mission-critical occupations to the Office of Personnel Management (OPM). NSF has subsequently worked with OMB and OPM to revise the list of future deliverables and expects to recover its “green” status for human capital within the next two quarters. The agency acknowledges that it has other remaining human capital challenges, including distributing administrative functions more effectively, implementing the workforce and succession plans, and completing a new human capital management plan.

The agency is also considering potential solutions to the various issues associated with the employment of temporary professional staff known as “rotators”. NSF has long valued rotators for the fresh scientific knowledge they bring to the agency, but are vulnerable to criticism for their lack of institutional knowledge and management skills, which are particularly important at the senior level. In 2008, NSF expects to initiate an executive-level mentoring and training program called “on-boarding” that will include learning modules specifically geared toward those who lack experience and knowledge about the ways of NSF and the federal government. The proposal came out of a report issued by a committee of senior staff tasked with assessing the adequacy of the agency’s senior executive leadership in terms of quantity, quality, and balance between permanent and temporary professionals. The committee recommended that the agency improve the balance between permanent and temporary executive-level leadership across NSF’s organizational units to ensure organizational stability, the retention of institutional knowledge, and the infusion of new talent. While senior management has accepted these recommendations, implementation will pose a challenge.

Administrative infrastructure. Inadequate office space and travel funds continue to constrain NSF’s ability to administer its growing award portfolio by limiting the number of new hires that can be processed and on-site visits made to monitor the performance of awardees. The amount spent on office space has risen at a rate of just 6% per year, while funds available for travel have increased just 7% per year over the past 4 years, barely keeping pace with price increases. Meanwhile, the widespread perception of problems

that has beset NSF’s hiring and travel processing systems continued to produce low ratings from staff that participated in the most recent employee satisfaction survey. Both systems have been improved and upgraded over the past year, and the agency expects that this year’s surveys will reflect increased satisfaction with these two systems. However, problems in integrating the travel and financial systems in particular persist, causing inconvenience to the staff and consuming more of the traveler’s time than necessary. The challenge for NSF is to continue to improve the systems so they are easier for staff to use.

Budget, Cost and Performance Integration

Performance reporting. The Government Performance and Results Act (GPRA) was enacted in 1993 for the purpose of making government agencies more results-oriented. The Act requires each agency to develop a strategic plan that establishes specific goals against which its performance can be measured. GPRA poses a significant challenge to agencies engaged in scientific research because the benefits are notoriously difficult to measure and in some cases may only become apparent over many years. To assist in this assignment, NSF convenes an Advisory Committee on GPRA each year to assess progress in achieving its strategic goals. As in past years, this year’s committee made its evaluations based on a judgmental sample of awards chosen by NSF staff. The committee suggested that their conclusions would be more “robust” if it had better assurance that the awards selected by NSF for their review were representative of the entire project portfolio. The committee also stated that the issue, which had been raised in previous years, “needs to be addressed to enhance the credibility of the assessment process.” Lastly, the committee expressed additional concerns pertaining to the portfolio balance of some strategic goal areas and the criteria it was asked to apply in carrying out its evaluation responsibilities.²

Publicizing the results of scientific research is also important to advancing NSF’s science and education goals. OIG issued two related reports during 2006 on disseminating the results of NSF-funded research to the public. In the first report, we recommended that the agency make publication citations for each research project that it funds available on its website.³ In a follow-on report, OIG assessed interest among NSF’s stakeholders and managers in making even more information about research outcomes available to the public, and found strong interest in providing brief summaries of the results of each project NSF funds on the agency website.⁴ NSF agreed to take action in both cases and is in the process of implementing the recommendations. Most recently, the Congress has mandated through legislation that the agency report research results. The America Competes Act (Public Law No. 110) requires that NSF ensure that all final project reports and citations of published research documents resulting from research funded, in whole or in part, by the agency are made available to the public in a timely manner and electronically through NSF’s website. The agency should expeditiously implement this provision in order to further the public’s knowledge and understanding of scientific

² Report of the Advisory Committee for GPRA Performance Assessment FY 2007, pp. 10-11

³ NSF’s Policies on Public Access to the Results of NSF-Funded Research, February 2006, OIG 06-2-004

⁴ Interest in NSF Providing More Research Results, September 2006, OIG 06-2-013

research, assist researchers in building on prior work in their fields, and ultimately make its operations more transparent and accountable.

Cost information. Managerial (cost) accounting information is used to evaluate operational effectiveness and efficiency. However, NSF does not collect enough information about its operational costs to enable its managers and oversight officials to adequately assess its past performance or to provide a historical context that would inform future decisions. We continue to believe that the measurement and comparison of inputs to outputs is essential to any meaningful review of an organization’s efficiency and that NSF would greatly benefit by adding this capability. In recent years, the agency has enhanced its cost accounting system so it can track costs according to strategic goals, as well as the ten investment categories that are subject to OMB evaluation. While the current system provides aggregated costs that may be useful in assessing strategy, it does not track the costs of NSF’s internal business processes and activities, such as soliciting grants, conducting merit reviews, or performing post-award grant administration. Such information would have been especially useful in evaluating the costs and benefits of many of the recommendations to re-engineer its business processes that the agency received as a result of its recent Business Analysis contract. The challenge for NSF is to obtain such information at a modest expense and without placing an additional recordkeeping burden on staff.

Information Technology

Implementing enterprise architecture. Enterprise architecture (EA) is a key component of the President’s Management Agenda and its Expanded Electronic Government initiative. EA refers to a blueprint for organizational change that describes, in both operational and technological terms, how an entity currently operates and how it intends to operate in the future. It also includes a plan for transitioning to this future state. A well-defined EA is an essential tool for leveraging information technology (IT) in the transformation of business and mission operations.

In 2006, the Government Accountability Office (GAO) issued a report on the progress made by 27 federal departments and agencies toward establishing EA programs. GAO found that NSF lagged behind all but four of the agencies studied, satisfying only 52 percent of GAO’s core elements for effective EA management. In 2007, the Office of Management and Budget (OMB) reviewed NSF’s EA program, rated the program as “Green” both overall and in each individual assessment area, and gave it one of the highest scores of the 26 programs it reviewed. However, OMB also made several recommendations pertaining to various elements of EA such as transition strategy, cross agency initiatives, value measurement, outcomes, and performance data. NSF has developed a plan to address these recommendations as it continues to implement its EA program.

Successful implementation of its EA program is critical to almost all of NSF’s activities, and should result in both cost savings and improved performance. Some of the desired outcomes NSF describes in its EA Management Guide are fewer applications, reduced

system complexity, and improved application and systems interoperability, data integration, and information sharing. In particular, we note that navigating NSF systems to get coordinated financial and programmatic information can be difficult and may impede the efforts of program managers and other staff from overseeing the financial and administrative requirements of their awardees. We, therefore, consider EA to be a challenge that continues to require management attention and support.

United States Antarctic Program

USAP long-term planning. At a time of growing public interest in scientific research, the U.S. Antarctic Program (USAP) carries a higher profile than many other NSF-funded projects. The agency’s Office of Polar Programs (OPP) oversees the USAP and manages all U.S. activities in the Antarctic serving the scientific community as a single program. Like a small government, OPP provides basic services through a number of contractors to as many as 3000 Americans who reside and work in Antarctica, as well as the infrastructure, instrumentation, and logistics necessary to support the research efforts of scientists from around the world. The successful operation of the USAP requires a unique management and administrative skill set. OPP staff must not only know the science, but must also manage contractors engaged in delivering a broad range of services to the American scientific community located in a difficult and dangerous environment.

Over the past few years, several program reviews have focused on needed improvements in long-range planning for the USAP. A 2003 OIG audit recommended that NSF develop a life-cycle oriented capital asset management program to ensure that infrastructure is replenished as needed and does not jeopardize the safety, security, or mission of those who locate in Antarctica.⁵ This recommendation remains unresolved. However, during FY 2007, OPP began to address recommendations to improve long-range planning made by last year’s Committee of Visitors (COV). The COV identified the important need for long-range planning to 1) take into account future research needs and their attendant logistical challenges, and 2) include improved projections for the cost of servicing specific research projects in order to ensure adequate planning. At the USAP annual planning conference attended by scientists, contractors, and NSF staff, OPP presented future infrastructure improvements that are either being planned or contemplated and listened as researchers discussed their future needs for services and technology. In response to the second recommendation, OPP presented a new costing methodology at the conference aimed at simplifying cost projections and making them more accurate. However it is too soon to know if this approach will resolve the issues identified by the COV.

Information technology systems also play an essential life-support role in such a harsh environment. The evaluation report our office is required to prepare under the Federal Information Security Management Act (FISMA) noted again in 2007 that NSF needed to make improvements in the USAP operating platform and in disaster recovery, though

⁵ Audit of Occupational Health & Safety and Medical Programs in the United States Antarctic Program, OIG 03-2-003, March 2003

progress had been made in both areas.⁶ The agency is funding studies on what course of action will best address the problems raised in the report. The lack of a disaster recovery plan means that USAP may not be able to recover in a timely or complete manner from a significant incident, possibly resulting in USAP incapacity to carry out its life-support mission at the Antarctic bases. The risks inherent in the USAP program create a significant ongoing challenge for NSF.

Property, plant, and equipment. In FY 2006, the financial statement auditors noted that NSF had not been verifying cost information submitted by its primary USAP contractor or by third parties providing shipping and transportation services. The cost of shipping construction materials to Antarctica is significant, sometimes more than that of the materials themselves, and is capitalized as part of the construction cost of the asset. The auditors also noted that NSF had not maintained original source documentation for USAP property plant and equipment (PP&E) acquisitions.

Without proper verification, as the auditors’ FY 2006 report pointed out, NSF could not be certain that the cost information provided by the contractors was reliable. Therefore, NSF management could not have assurance that the millions of dollars related to PP&E carried on NSF’s balance sheet are accurate. The auditors have recommended that NSF obtain documentation for capitalized property acquired in past years, implement documentation verification procedures for Antarctic contractor’s FY 2007 and future activity, and maintain an electronic copy of significant source documentation examined during that verification process. In FY 2007, NSF began to verify accounting information from its primary contractor for current year activity, but not for prior years nor for transportation services.

During the past year, auditors have found numerous instances in which NSF’s contractor did not record property transactions in a timely manner, support recorded transactions with the proper documentation, or properly calculate and record freight costs. The auditors found that NSF’s oversight of the contractor’s internal controls over the processing, recording, and reporting of PP&E needs improvement.

NSF and its contractor use various PP&E systems to capture and report their activities for the USAP. Financial information from those systems is not integrated with NSF’s general ledger system so the data are more vulnerable to internal control problems and error, as the information must be manually reentered in each system. In addition, a majority of USAP PP&E financial activities originate from the contractor’s outdated software, resulting in a manually intensive and time-consuming financial reporting process that is prone to human error. Because NSF’s contractual relationship with the contractor is not permanent in nature, the change to another contractor also exposes NSF to potential loss of data.

⁶ NSF Federal Information Security Management Act, 2007 Independent Evaluation Report

Merit Review

Broadening Participation in the Merit Review Process. At the core of NSF’s operations is the merit review process, which is intended to ensure that the review and selection of proposals for funding are fair and conducted according to the highest standards. Broadening the participation of minorities and women in the merit review process continues to be a high priority of the agency and a critical step in accomplishing the broader goal of diversifying the STEM⁷ workforce. NSF’s 2006-2011 strategic plan elevated the status of broadening participation, stating that it will “expand efforts to broaden participation from underrepresented groups and diverse institutions in all NSF activities”.⁸ During FY 2006, the funding rate for both underrepresented minorities and women increased from the previous year by one percentage point, but failed to keep pace with the increase in the funding rate for all PIs, which increased by two points. The funding rate for African American PIs ran counter to the trend of an increasing overall funding rate and slipped from 24% to 22%, three points below the rate for all PIs. Year-to-year variation in the funding rate of any particular group is not necessarily a cause for concern, but it should be monitored to determine if there are any developing trends that require further review or corrective action.

Although NSF cannot legally require its merit panel reviewers to provide demographic information, it has since 2001 requested that they provide such data to determine the extent to which underrepresented groups participate in the NSF reviewer population. The percentage of reviewers who report demographic information has increased from just 9% in 2002 to 25% in 2006. Among reviewers who voluntarily provided demographic information, 36% indicated that they were members of an underrepresented group, a proportion that has remained fairly stable over time. Last year, both the National Science Board and the Advisory Committee on GPRA recommended that NSF improve the information in the reviewers database. In its most recent report, the Committee on Equal Opportunities in Science and Engineering recommended that NSF “survey and report annually on the participation of women, underrepresented minorities, and persons with disabilities in each review panel, advisory committee, and committee of visitors”.⁹ Because developing the full potential of underrepresented groups is likely to confer important social and economic benefits, the effort to broaden participation will continue to be an important challenge facing NSF.

⁷ Science, Technology, Engineering and Mathematics

⁸ National Science Foundation Strategic Plan FY 2006-2011, pp. 9-10

⁹ 2005-2006 CEOSE Biennial Report to Congress, p.32

NATIONAL SCIENCE FOUNDATION
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OFFICE OF THE
DIRECTOR

November 5, 2007

MEMORANDUM

To: Dr. Christine C. Boesz
Inspector General, NSF

From: Dr. Arden L. Bement, Jr.
Director, NSF

Subject: Response to the Inspector General’s Memorandum
Management Challenges for NSF in 2008

Thank you for your memorandum of October 17, 2007 regarding potential management challenges the National Science Foundation (NSF) faces during the remainder of Fiscal Year (FY) 2008, and for your acknowledgement of the significant progress NSF has made over this last fiscal year in meeting the FY 2007 management challenges as highlighted below. As in the past, your memorandum will be discussed in the Senior Management Round Table (SMaRT).

NSF has focused on continuing progress on implementation of the requirements of *Office of Management and Budget Circular A-123: Management’s Responsibility for Internal Control*, the most recent implementing guidance for the *Federal Managers’ Financial Integrity Act of 1982*. These internal controls are essential to ensuring compliance with laws and regulations, reliable financial reporting, and the efficiency and effectiveness of NSF operations. A summary of the Foundation’s related activities and results are in this year’s *Annual Financial Report* in the Management’s Discussion and Analysis, “Management Assurances” discussion.

During this past year, NSF’s accomplishments on these management challenges reflect significant progress for the Foundation on its ongoing commitment to excellence and results-oriented management. Once again, NSF has demonstrated its stewardship toward our national goals, and dedication and commitment for the agency’s success. The Foundation has invested in essential business models, policies and practices essential to safeguarding public funds, and has continued to maintain a reputation for consistency, efficiency, and quality as we met a variety of challenges while experiencing growth in our budget and program activities.

A handwritten signature in cursive script, appearing to read 'Arden L. Bement, Jr.'.

Arden L. Bement, Jr.
Director

Attachment

cc: Chair, National Science Board

**NATIONAL SCIENCE FOUNDATION
Progress during Fiscal Year 2007
On the OIG’s 2007 Management Challenges**

On October 16, 2006, the Office of Inspect General (OIG) issued a statement summarizing what the OIG considered to be the most serious management and performance challenges facing the National Science Foundation. These are shown on the table below. This report summarizes NSF actions on these management challenges.

OIG Management Challenges for FY 2007	
1. Award Administration	<ul style="list-style-type: none"> • Post-Award Administration > Cost Sharing • Large Infrastructure Projects • Contract Monitoring • Promoting Integrity
2. Human Capital	<ul style="list-style-type: none"> • Workforce Planning > NSF’s Non-permanent Workforce • Administrative Infrastructure > Space Limitations > FedTraveler
3. Budget, Cost and Performance Integration	<ul style="list-style-type: none"> • Performance Reporting > Project Reporting • Cost Information
4. Information Technology	<ul style="list-style-type: none"> • Enterprise Architecture
5. U.S. Antarctic Program	<ul style="list-style-type: none"> • Long-term Planning
6. Merit Review	<ul style="list-style-type: none"> • Broadening Participation

Summary of NSF Actions on FY 2007 OIG Management Challenges

1. AWARD ADMINISTRATION

Post-Award Administration: NSF continues to refine its post-award financial and administrative monitoring program. Within the last three years, BFA has established the Division of Institution and Award Support to lead the Agency’s cradle-to-grave award administration efforts; significantly increased staff and contractor expertise specifically dedicated to post-award activities; and continued to incorporate government-wide best practices throughout its efforts. Through a combined set of activities (on-site

reviews, business system reviews, desk reviews, transactional testing), NSF is confident in its ability to ensure exemplary stewardship of tax payer investment. Over the past several years we have worked diligently to develop a comprehensive and structured post-award monitoring program. The benefits of this program include the following:

- Using the sound and cost-beneficial approach of a risk assessment model allows us to focus monitoring resources on the 25 percent of NSF’s awardees that manage 93 percent of the award dollars. In this way, we ensure stewardship over federal funding and manage burden on the community. We have used a mixed protocol of desk reviews, on-site visits, and financial transaction testing that further targets the Foundation’s resources in this endeavor.
- NSF now detects potential problems earlier in the award life cycle, and we can assist organizations in addressing deficiencies that impact their ability to adequately manage Federal funds and thus possibly avoiding audit findings.
- With our more holistic perspective, we are able to mine monitoring results for “lessons learned” that help form both ours and the institutions’ policies and practices around sound stewardship.

Our Award Monitoring and Business Assistance Program is increasingly recognized as a standard of excellence across the federal government, consistent with the Foundation’s reputation for first-class management.

Specific 2007 Achievements:

- Continued implementation and refinement of the Award Monitoring and Business Assistance Program (AMBAP); the program provides disciplined and comprehensive post-award monitoring for NSF’s high-risk and medium-risk awards. In FY 2007, staff conducted 22 AMBAP site visits; in addition, 115 desk reviews were completed and 38 are in progress, as of September 26, 2007.
- A database system was developed to enhance the tracking of post-award monitoring site visit and desk review activities.
- Submission of Indirect Cost Rate proposals from potential awardees has been streamlined.
- NSF’s first, unified set of standard operating procedures for post-award monitoring now includes upgrades of site visit protocols and templates designed to elicit consistent and comprehensive information. The desk review protocol has been developed and implemented. Protocols for follow-up activities have been completed and are currently being implemented for both site visits and desk reviews.

Future plans include full implementation of the database and analytical tools, analysis of the survey feedback, and continued assessment and refinement of the AMBAP activities.

Cost Sharing: The National Science Board eliminated program-specific cost sharing in October 2004. NSF has worked diligently to implement the Board’s policy and communicate that there is no expectation by the Foundation that proposals submitted for funding will include a cost sharing component.

- Through its internal clearance processes, NSF continues to work diligently with all program offices to remove cost sharing requirements in remaining solicitations. The Foundation has ensured that no new solicitations have been issued that contain cost sharing since the Board changed the policy except as required by law, as noted below.
- Briefings and extensive back-up material have been provided to the Board summarizing the current status of cost sharing at NSF.
- All of the Foundation’s major policy documents, both internal and external, have been revised to reflect elimination of program-specific cost sharing. The “Grant Proposal Guide,” “Award & Administration Guide” and the “Proposal and Award Manual” all reflect this change, as well as elimination of the long-standing de minimus across-the-board statutory cost sharing requirement that is no longer included in NSF Appropriations language.

- The NSF Grant General Conditions (GC-1) and the Cooperative Agreement Financial and Administrative Terms and Conditions (CA-FATC) have also been updated to reflect these changes and the new terms and conditions are referenced in all award notices issued on or after June 1, 2007.
- BFA’s formal and informal internal and external outreach programs include discussions of this policy change.
- Cost sharing, where still required on older awards, continues to be an important element in NSF’s post award monitoring visits and any needed follow-up plans. A briefing to senior management in April 2007 highlighted the essential elements of the policy and included information to assist Program Officers in evaluating the annual notifications submitted by grantees whose awards contain cost sharing of \$500,000 or more.
- Revised the Major Research Instrumentation program solicitation to incorporate the statutorily mandated cost sharing requirement imposed by the America Competes Act. A "Dear Colleague" Letter also was issued to announce this requirement to the research community.

Large Infrastructure Projects:

- The Large Facility Project Office (LFP) has increased the number of staff every year since 2004. Presently, there are four FTEs, including the Deputy Director, and one IPA.
- The “Large Facilities Manual” was released in May 2007. The manual provides guidance for NSF staff and awardees to carry out effective project planning, management, and oversight of large facilities. Supplemental modules are being developed during FY 2008.
- Tracking and reporting on facility obligations by lifecycle phase uses the existing Financial Award System (FAS) and the e-Jacket web-based system. Reports on obligation funding and expenditure spending can easily be run for a facility by fiscal year, lifecycle phase(s) and project. An obligation report provides each funding transaction that was made to an entity in a particular fiscal year. An expenditure report provides each transaction in which money is drawn down from an obligation by fiscal year. In FY 2008, the Large Facility staff will continue to discuss with NSF program directors of large facilities how to best capture the funding of obligations that is used to do research at a facility. Presently, we are relying on ad hoc reporting.
- Training is being developed on the Manual and also a new web-based training system is being developed on the financial and reporting tracking of obligations. This training will be offered to everyone at NSF. *Project Science Workshop* is designed specifically for large research facilities and is held annually. The workshop, held at the Beckman Center at the University of California, Irvine, October 16-19, 2007, provides discussion and best practices on project management from the project and agency personnel. This workshop is also attended by researchers supported by other agencies, such as the Department of Energy, and foreign governments.
- The Business System Review (BSR) Guide has been used for a number of site visits during 2007. A Facilities Subcommittee of the Business and Operations Advisory Committee met on March 28-29 at NSF to review and make recommendations on the guide. Their report will be forwarded to the Business and Operations Advisory Committee (B&O AC) in the Fall 2007.

Contract Monitoring: The Division of Acquisition and Cooperative Support (DACS) will continue to perform Quarterly Expenditure Report reviews as a risk mitigation mechanism for three of NSF’s major advance payment contracts.

The NSF “Contracting Manual” has been updated to clearly establish a contract monitoring and oversight program. The revised “Contracting Manual” includes a clear delineation of contracting personnel’s roles and responsibilities regarding the DACS oversight program. Furthermore, the manual includes a file check list and file review checklist to ensure that contractual files contain the appropriate documentation.

DACS has hired a designated acquisition workforce manager to coordinate the training of NSF employees responsible for maintaining and documenting receipt of contract deliverables, and increased its staffing to

include two procurement analysts to implement the oversight program, and is aggressively moving forward to filling additional vacancies.

Promoting Integrity: NSF’s strategy to promote the integrity of scientific and engineering research has several dimensions:

- > *Training of Future Scientists and Engineers.* Examples include:
 - Ethics training for all Science and Technology Centers (STC) and Engineering Resource Centers (ERC).
 - Integrative Graduate Education and Research Traineeship program requires projects to provide instruction in ethics and the responsible conduct of research.
 - > *Sessions with Institution and PI Community.* Examples include:
 - Office of Inspector General conducts a session which highlights the importance of scientific integrity at all NSF Regional Grants Conferences.
 - Continuing discussions regarding ethics are held at Federal Demonstration Partnership meetings.
 - > *NSF Program Officer Training.* Recognizing and handling of cases involving potential scientific misconduct are part of training included in NSF Program Management Seminar.
- Merit Review Process.* The NSF merit review process provides opportunities for critical attention to issues of integrity.

NSF’s emphasis on this topic has translated into numerous web-based venues to provide education and training on ethics in science. For example, offerings developed through the STCs include a graduate on-line course (Kansas University), a web-based certification program (University of Washington), and a mandatory ethics seminar with webcast (University of Illinois at Urbana-Champaign). In addition, NSF supports a program called Ethics Education in Science and Engineering to improve ethics education in all of the fields of science and engineering that NSF supports, including in interdisciplinary or inter-institutional contexts. See <http://www.nsf.gov/pubs/2007/nsf07541/nsf07541.htm>

2. HUMAN CAPITAL

Workforce Planning: Progress continues to be made in the development and implementation of an effective workforce planning process, as evidenced by the following examples:

- A committee of senior management from each Directorate and Office designed and implemented an operating workforce planning process in FY 2006.
- A 3-year strategic workforce plan was documented in FY 2006. The draft plan is being updated this year to align with NSF’s Strategic Plan, and will be reviewed and updated annually.
- Each Directorate/Office created staffing plans for FY 2006 and FY 2007 based upon the methodology developed in the workforce planning process. These plans aided NSF’s staffing efforts for the last two years. FY 2008 staffing planning will begin in the fall.
- The Directorate for Computer and Information Science and Engineering (CISE) piloted a workload demand analysis process which will be made available for use throughout the Foundation in FY 2008. This process will aid in anticipating future workload and help determine the appropriate mix of staff within a Directorate/Office.

In addition, in FY 2007, NSF began a comprehensive succession planning process that will identify key succession planning strategies.

NSF’s Non-Permanent Workforce: During 2003, the National Academy of Public Administration studied, among other things, NSF’s use of “non-permanent” employees. That report noted that NSF uses its “rotating” workforce in an appropriate manner. It also noted that the NSF understands the challenges

of managing such a mixed workforce, part permanent-part temporary, and has managed this situation very well so far, and recommended no changes to the management of this situation.

NSF has always appreciated the ability and authority to recruit and hire the most capable scientists and engineers to oversee and manage its frontier science and engineering activities. NSF also understands the challenges that come with this authority, and continuously works to improve the orientation, the training, and the appreciation of associated responsibilities that come with federal employment and excellence in program management. One key to NSF’s success is a continual and transparent exchange between the science community and the agency. NSF’s ability to utilize rotators is essential to carrying out the agency mission.

Administrative Infrastructure: To address the issue of adequate Human Resource Management administrative systems to hire new staff, the following actions were undertaken in FY 2006-2007:

- Significantly expanded contract support to perform operational and processing work in order to focus permanent resources on strategic change and strategic partnerships.
- Created Human Resource service teams with specific customer account representatives to meet frequently with management officials in order to accurately define and meet recruitment needs.
- Established new “service agreement” approach to fill positions whereby the hiring office and HRM agree up front on recruiting steps and expected timeline to complete hiring action.
- Established and announced a number of open continuous positions to assure an ongoing supply of candidates for commonly filled positions.
- Implemented processes to improve the quality of questions used in Quick Hire announcements in order to make clearer distinctions between candidates.
- Established a new pay-setting policy that streamlined the pay calculation process for NSF Excepted Service positions and significantly reduced the number of requests for exceptions.

As a result of these efforts, NSF reduced total time-to-hire for all NSF recruitments by an average of more than 30 percent from 2006 to 2007.

Space Limitations: The problem of inadequate space and space limitations as well as the ability to obtain space for panels and meetings is being addressed in a number of ways:

- NSF management is working closely with Tishman Speyer, the new owners of Stafford Place and Stafford II, to identify new space that may become available.
- NSF is working with GSA to allow various lease arrangements as the new space comes available so that we will have flexibility in obtaining leased office space.
- Since 2006, NSF has moved 61 staff to Stafford II. Currently, office space construction is taking place to build 67 new offices for space that was recently acquired in Stafford II.
- NSF expects more space to come available over the next three years in Stafford II and is planning accordingly based on various space scenarios.
- NSF management determined that much of the problem finding space for panels and meetings stems from staff who reserve rooms and fail to cancel them when not needed. The conference services staff is addressing this problem by contacting meeting coordinators in advance to confirm they will need the rooms. We have found that several meeting rooms are made available each week simply by releasing rooms that will not be used and thus making them available for use by other staff. Although this is somewhat labor intensive, it has been effective in relieving the problem of inadequate numbers of available meeting rooms.

FedTraveler:

- NSF worked closely with an inter-agency group and GSA to outline FedTraveler system problems that were cited as hampering staff members in their attempts to make travel arrangements. A letter

of cure to EDS, the FedTraveler provider, listed all known defects in the system. GSA monitored the resolution of the issues, and determined that EDS satisfactorily met all the conditions in the letter.

- EDS worked with user groups to make the navigation of the FedTraveler system more user-friendly, resulting in many system changes over the past 18 months.
- In July of 2007, NSF worked with EDS to integrate FedTraveler with the NSF finance system. Full integration of the two systems has enhanced the functionality of the travel and reimbursement system. For example, when the final approval of a travel plan is done in the FedTraveler system, the NSF finance system immediately obligates the travel funds, thus ensuring that the ticketing agent at Sato Travel issues the ticket for the traveler.
- A new FedTraveler wizard style interface prototype has been developed by EDS based on user feedback, and is expected to enhance ease of use for staff. The new interface is currently being shown to customer agencies and is expected to be ready for release within 6 to 12 months.

3. BUDGET, COST, AND PERFORMANCE INTEGRATION

Performance Reporting: The Advisory Committee for GPRA Performance Assessment (AC/GPA) recommended in their 2006 Report that program highlights (formerly called “nuggets”) include more specific information on desired activities and outcomes. In response, NSF revised the process by which program officers write and categorize highlights for the AC/GPA’s use. Program officers were asked to explain how the particular highlight addressed one of the strategic outcome goals (Discovery, Learning, or Research Infrastructure) as described in the NSF Strategic Plan for FY 2006-2011. In addition, program officers were asked whether the highlight represented transformative research and if so, why. After reviewing more than 1,100 highlights, AC/GPA members determined that NSF had demonstrated significant achievement for its strategic outcome goals, but recommended in their 2007 Report that “specific criteria for each of the strategic goals” be designated to assist the Committee in its assessment the following year. NSF will implement this recommendation for the Committee’s review of FY 2007 highlights.

Project Reporting: NSF continues to advance its capabilities for the receipt, submission, and monitoring of annual and final project reports through IT enhancements, as well as upgrades to its external and internal policy documents.

Specific achievements:

- In November 2006, NSF implemented its first data-driven, web-based project reporting and notification system for annual and final project reports. Incorporated into FastLane, this system is comprised of a module accessible through NSF’s internal eJacket system and complemented by a plethora of tools explicitly designed to benefit both NSF’s external research community and its internal scientific staff.
- Business rules reflecting NSF policies and appropriate edits supporting these rules were incorporated into NSF’s back office corporate IT systems (i.e., Proposal and Reviewer System, Award System).
- Clarifications to the roles and responsibilities for project reporting by institutional awardees, Principal Investigators/co-Principal Investigators, and NSF Program Officers have been incorporated into recent updates of the “Proposal and Award Policies and Procedures Guide and the Proposal and Award Manual”.
- Implementation of this re-engineering of processes for tracking and notification completes resolution of all outstanding findings identified under the OIG Audit Report of December 13, 2004.

Cost Information: NSF maintains costs of its operations at the highest and lowest levels. NSF monitors costs of its operations at a very detailed level in its Budget Execution Plans. NSF also tracks costs of its operations at the highest levels for our strategic goals and our appropriations. NSF has determined that process oriented cost information would be of limited utility to agency management. The agency instead

relies upon efficiency measures that focus on process and performance, which are more meaningful and useful than measures that focus strictly on cost.

- In conjunction with the PART review and implementation of the Budget and Performance Integration Initiative, NSF has adopted efficiency goals that constantly challenge the staff to develop and implement the most efficient work processes and operations. As an example, the agency is currently undertaking an Administrative Functions pilot to better align and streamline staff functions and responsibilities.
- NSF administrative costs are presented in the agency Budget and tracked via the Statement of Net Cost. Because about 95 percent of NSF’s funding goes directly to programmatic investments, detailed information on administrative costs is of limited utility to NSF program managers. To adopt a system for tracking costs at detailed levels of the organization would in itself undermine the efficiency of NSF’s operations and the cost of such a system would be grossly disproportionate to the benefits.

4. INFORMATION TECHNOLOGY

Enterprise Architecture: NSF’s Enterprise Architecture (EA) is evaluated annually by the Office of Management and Budget (OMB) and periodically by the General Accountability Office (GAO) to assess the completion of EA work products, use of EA to drive improved decision-making, and results achieved from using EA. NSF has taken the following actions in response to the GAO EA report:

- Established an agency policy for EA development, maintenance, and compliance.
- Formally established the CIO Advisory Group (CIOAG) as the group representing the agency that is responsible for directing, overseeing, and approving EA.
- Obtained CIOAG approval of the current version of EA.
- Periodically measured and reported progress against EA plans to the CIOAG.
- Expanded our EA methodology to include steps for EA development.

Also, NSF received high ratings from OMB for the quality of our Enterprise Architecture efforts.

5. THE UNITED STATES ANTARCTIC PROGRAM

Long-Term Planning: NSF was directed by Presidential Memorandum 6646 (February 5, 1982) to fund and manage the U.S. Antarctic Program as a single package. As such, NSF funds forefront scientific research, secures and manages the associated logistics support and infrastructure that makes this research possible, and protects the Antarctic environment as well as the health and safety of Program participants.

OPP tasked an external group of experts to advise on the logistics and infrastructure needed to sustain the high priority research program and to consider modifications that would enable research in new geographical regions or on new subjects. Funding to begin implementing the resulting recommendations was requested in the FY 2007 budget to Congress and work on these efforts continues.

The USAP is part of the agency-wide IT Security Program that encompasses all aspects of information security, including policies, procedures and plans; security assessments; audits and controls; security awareness training; certification and accreditation; intrusion detection and computer incident response team (CIRT); and vulnerability assessment and penetration tests. The Antarctic support contractor recently submitted proposals to implement a disaster recovery program and to replace the software systems currently in use. Management is considering these proposals, as well as their priority relative to other USAP needs.

6. MERIT REVIEW

Broadening Participation: The goal of broadening participation of underrepresented groups in the sciences and engineering has long been a priority at NSF, and is embedded as a core value in the Strategic Plan. Proposals from women and minorities increased by 3.2 percent in FY 2006 as compared to FY 2005; the overall increase in proposal submissions was only 1.6 percent. This suggests that some progress is being made in attracting more applicants from underrepresented groups. However over time, there has been an increased tendency of NSF proposers to not report demographic information. With respect to reviewers, in FY 2006, 25 percent of reviewers reported demographic information, 36 percent of which were members of underrepresented groups. Both of these numbers represent an increase over the previous year. NSF continues to ask proposers and reviewers to volunteer information about their ethnicity, gender, or disability status. Nonetheless, since providing this information is not mandatory, tracking progress in increasing the participation of underrepresented groups continues to be a challenge.

To address this challenge, in FY 2007 NSF has:

- Formed an NSF-wide working group on Broadening Participation, whose charge is to:
1) develop a plan to increase participation in NSF programs from underrepresented groups, which includes defining existing baseline data; and 2) develop a plan to broaden the pool of reviewers for NSF proposals. The working group presented a draft report with specific recommendations to NSF Senior Management in mid-September, 2007.
- Begun conceptual analysis of an integrated and dynamic Reviewer Management System.

PATENTS AND INVENTIONS RESULTING FROM NSF SUPPORT

The following information about inventions is being reported in compliance with Section 3(f) of the National Science Foundation Act of 1950, as amended [42 U.S.C. 1862(f)]. There were 1,455 NSF invention disclosures reported to the Foundation either directly or through NIH's iEdison database during FY 2007. Rights to these inventions were allocated in accordance with Chapter 18 of Title 35 of the United States Code, commonly called the "Bayh-Dole Act."

ACRONYMS

AC	Advisory Committee	GC	General Counsel
AC/GPA	Advisory Committee for GPRA Performance Assessment	GMLoB	Grants Management Line of Business
AFR	Annual Financial Report	GPA	GPRA Performance Assessment
AMBAP	Award Monitoring and Business Assistance Program	GPRA	Government Performance and Results Act
APIC	Accountability and Performance Integration Council	GSA	Government Services Administration
BFA	Office of Budget, Finance, and Award Management	HRM	Human Resource Management
CFO	Chief Financial Officer	ICWG	Ice Core Working Group
CIO	Chief Information Officer	ILAB	Independent Laboratory Access for Blind and Visually Impaired Students
CIOAG	Chief Information Officer Advisory Group	IPA	Intergovernmental Personnel Act
CIRT	Computer Incident Response Team	IPIA	Improper Payments Information Act of 2002
CISE	Directorate for Computer and Information Science and Engineering	IT	Information Technology
CMIA	Cash Management Improvement Act	LFP	Large Facility Projects Management & Oversight Office
COSEPUP	Committee on Science, Engineering, and Public Policy	MTS	Federal Measurement Tracking System
COV	Committee of Visitors	NITRD	Networking and Information Technology Research and Development
DACS	Division of Acquisition and Cooperative Support	NSB	National Science Board
DNA	Deoxyribonucleic Acid	NSF	National Science Foundation
EDS	Electronic Data Systems	OIG	Office of Inspector General
EPA	Environmental Protection Agency	OMB	Office of Management and Budget
ERC	Engineering Research Center	OPM	United States Office of Personnel Management
FAS	Financial Accounting System	OPP	Office of Polar Programs
FATC	Financial & Administrative Terms and Conditions	PAR	Performance and Accountability Report
FCTR	Federal Cash Transaction Report	PARS	Proposal and Reviewer System
FFMIA	Federal Financial Management Improvement Act of 1996	PART	Program Assessment Rating Tool
FFR	Federal Financial Report	PI	Principal Investigator
FMFIA	Federal Managers' Financial Integrity Act of 1982	PMA	President's Management Agenda
FMLOB	Financial Management Line of Business	Q3	Third Quarter
FMSM	Financial Management Service Metrics	SSP	Shared Service Provider
FTE	Full-time Equivalency	STC	Science and Technology Center
FY	Fiscal Year	USAID	U.S. Agency for International Development
GAAP	Generally Accepted Accounting Principles	USAP	U.S. Antarctic Program
GAO	Government Accountability Office	USSGL	U.S. Government Standard General Ledger
		UV	ultraviolet
		VA	Veterans Affairs

